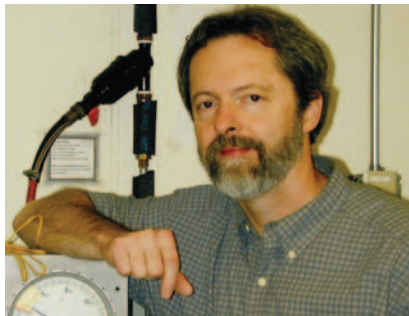


INTRODUCING BRUCE WATSON



At the end of 2005, I finished my term as editor for *Elements*. Editors serve staggered three-year terms, so that a new editor is appointed each year. By this means, we intend that *Elements* remain a vital and current voice for the wide variety of topics that make up our disciplines.

With this in mind, I am very pleased to introduce my

replacement, **Bruce Watson**. Bruce is currently an Institute Professor of Science at Rensselaer Polytechnic Institute. He is a past president of the Mineralogical Society of America, a member of the National Academy of Science, and a recent recipient of the Goldschmidt Medal of the Geochemical Society. His research addresses the many processes affecting the behavior of the chemical elements in the Earth.

A native of New Hampshire, he attended Williams College (where his interest in geology was kindled) and later transferred to the University of New Hampshire, where he received a BA in geology in 1972. After a summer field season with the US Geological Survey, he entered graduate school at MIT with the intention of becoming a volcanologist. The lure of geochemistry at MIT in the 1970s was strong, however, and Bruce was particularly drawn to experimental approaches. He received his PhD in geochemistry from MIT in 1976.

Over a 30-year career, Bruce has pursued such research topics as mineral–melt partitioning, diffusion (in melts, crystals, and fluids), textural aspects of partially molten and fluid-bearing rocks, and kinetic disequilibria in materials as diverse as iron meteorites and marine carbonates. In parallel with this “process-oriented” theme, he has maintained a long-term interest in accessory minerals as hosts for geochemically interesting trace elements and isotopes and has contributed papers on such topics as solubilities and dissolution rates, lattice diffusion of radiogenic isotopes, and inclusion–host relationships. Zircon is his hands-down favorite mineral: over the past 27 years, he has published about 20 papers addressing the survivability, (diffusive) retentivity, and crystallization behavior of this remarkable mineral, which serves as the crustal geochemist’s primary window into the Earth’s distant past.

Bruce’s past editorial service includes two assignments with *Geochimica et Cosmochimica Acta* (associate editor, 1985–1988; editorial board member, 1991–1995), and he has acted as editor of *Chemical Geology* (1991–1995), editor for petrology and geochemistry of *Neues Jahrbuch für Mineralogie* (1988–1995), and editorial board member for *Geofluids* (2003–present).

Bruce has a deep appreciation for the central role of the mineral sciences and geochemistry in the broader sphere of Earth and environmental sciences, and he brings this perspective to *Elements*. Welcome to the team.

Rod Ewing

BIENVENUE À LA SOCIÉTÉ FRANÇAISE DE MINÉRALOGIE ET DE CRISTALLOGRAPHIE (SFMC)

With this issue we warmly welcome one of the world’s oldest mineralogical organizations, the Société Française de Minéralogie et de Cristallographie, to the group of participating societies listed in each issue of *Elements*. Although the founding organizations behind *Elements* are from countries where English is the main language, it has always been our hope that organizations that normally use other languages would join the consortium. The arrival of France is therefore especially significant, and we hope that national societies in other non-English-speaking countries will follow their lead. It is perhaps appropriate that France has been first to make this decision, because our managing editor, graphic designer, and printer are all based in Québec, where English is most certainly not the main language. We can thank French flair for the professional style and quality of *Elements*. Welcome aboard!

THE AESE AWARDS

We mentioned these awards in the last issue of *Elements*. We share excerpts from the letter Meg Smath, chair of the Association of Earth Science Editors’ Awards Committee, sent Rod Ewing.

I am pleased to inform you that we have conferred upon you our Award for Outstanding Editorial or Publishing Contributions. The reason you were nominated was your creation and editing of *Elements*. That simple sentence does not do justice to the tremendous effort you undertook, first in convincing all the different societies to share the dream with you, and then in making it happen. What you have achieved is a truly outstanding publication. In fact, AESE was so impressed by *Elements* that we named it one of the winners of our Outstanding Publication Award for 2005. This is the first time we have given this award to a journal; all previous winners have been monographs.

We realize of course that *Elements* did not come about from your efforts alone, but ... you are “certainly the person who began it ... and ... most certainly carefully [oversaw] its infancy....”

AESE does not give out its Award for Outstanding Editorial or Publishing Contributions every year, and not without careful deliberation. You join a select group of distinguished Earth scientists and writers: Julia Jackson (2002), John McPhee (1995), Gerald Friedman (1993), Allison (Pete) Palmer (1991), William H. Freeman Jr. (1985), Walter Sullivan (1983), Wendell Cochran (1982), Robert Bates (1981), Brian Skinner (1979), Philip Abelson (1976), Marie Siegrist (1974), Edwin Eckel (1973).

ABOUT THIS ISSUE

We continually try to identify timely, front-row topics to bring to you in each issue of *Elements*. This issue of *Elements* is a bit different, in that it centers around the tools that many of us use to perform our science. Some of these tools are relatively inexpensive, and some are valued at (literally) billions of dollars. But whatever the cost or the function, the tools described here have one critical aspect in common. They are all shared, and as such are available to the scientific community at large. These shared facilities, or “user facilities” as we call them, are of unimaginable benefit. Without them, such instruments and facilities would be available only to a select few, or more likely, not at all. User facilities, big and small, have changed the face of how we do our science.

We would like to thank Dr. Nicholas Woodward of the US Department of Energy for sponsoring a user-facility workshop in 2004, from where the idea for this issue of *Elements* ultimately came, and Dr. Stephen Sutton of the University of Chicago and Argonne National Laboratory, for bringing the idea of this issue for *Elements* to reality.

THANKS

As we start the new year, we would like to extend our most heartfelt thanks to all who have helped make *Elements* happen, issue after issue, in our launch year: guest editors, authors, contributors, copy editors, graphic artist, and all those who work behind the scenes. Working with Rod on this project has been a highlight and an inspiration for all of us (we will have more to say about this in the June issue, in which we will formally thank him). Even though he is officially “retired” from the magazine, he will continue to carry his duty until the June issue, for which he is principal editor.

Best wishes to all of you for 2006.

**Michael F. Hochella Jr., Ian Parsons, Bruce Watson,
and Pierrette Tremblay**

Check our website www.elementsmagazine.org

Did you know that a PDF file of every issue of *Elements* is posted on our website, with a one-issue delay (for example, a PDF file of this issue will be posted by the time you receive your printed copy of issue 2).